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EXAMINER

MENON, KRISHNAN S

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1723

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/003,037
Filing Date: November 02, 2001
Appellant(s): MORGAN ET AL.

Mark T. Garrett
For Appellant

EXAMINER'S ANSWER

MAILED

JAN 20 2006

GROUP 1700

This is in response to the appeal brief filed 12/20/05 appealing from the Office action
mailed 5/17/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix (Appendix 2) to the brief is correct.

(8) Evidence Relied Upon

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5,562,759	MORGAN et al	October 1996
4,438,863	WILSON et al	March 1984
4,678,375	GAGLE, et al.	July 1987

References C1-C13, submitted by the Appellant as prior art by IDS on 2/17/04

Declaration/affidavit submitted by the appellant on 2/6/04 and 3/28/05

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1,2,5,6,9-15, 28,29, 32 and 33 are rejected under 35 USC 103(a) as being unpatentable over applicant's own admission of prior art, in view of Gerber (US 4,503,988)

Instant claims are directed towards a device as shown in the references C4 and C2 as admitted by the applicant in the IDS of 2/17/04 as on sale or public use more than one year before the filing date of the application. Applicant also admits by affidavit that C4 is similar to the Gerber reference. Reference C4, as is the Gerber ref, teaches the float member, float compartment membrane, the first membrane and the float weights as claimed, but does not teach the plurality of gas relief vents. Ref C2 (public use or sale) teaches the relief vents in a device which has the floatation member and the float compartment membrane, but not the first membrane and the weights. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of C2 in the reference C4 (or the Gerber ref) for the gas relief vents to provide the gas or

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air relief to retain the membrane on the on the surface of water without lifting off due to accumulated gas underneath. One of ordinary skill in the art also would use the teaching of C4 (or the Gerber ref) in the teaching of C2 to have the first membrane between the floats to reduce the float and membrane material requirement and the weights to keep the covers under tension as taught by Gerber (col 1 line 54 – col 2 line 42).

The only element of the claims not clearly seen in these references C2 and C4 is the service opening of claims 14 and 15, which is shown by drawing 1-5, "Access Hatch" in reference C1, which is a proposal dated Nov 8, 1984, to build a membrane cover according to the specification provided by the solicitor (purchaser), and which belongs to a company by name ADI. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of C1 in the teaching of C4 to provide access ports for sampling or service equipment.

Applicants' declaration regarding the disclosure to Lemna Corporation is moot because, according to MPEP, public use or sale could be a "secret sale or offer to sell".

MPEP 2133.03

35 U.S.C. 102(b) "contains several distinct bars to patentability, each of which relates to activity or disclosure more than one year prior to the date of the application. Two of these - the public use' and the on sale' objections - are sometimes considered together although it is quite clear that either may apply when the other does not." Dart Indus. v. E.I. du Pont de Nemours & Co., 489 F.2d 1359, 1365, 179 USPQ 392, 396 (7th Cir. 1973). There may be a public use

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of an invention absent any sales activity. Likewise, there may be a nonpublic, e.g., "secret," sale or offer to sell an invention which nevertheless constitutes a statutory bar. *Hobbs v. United States*, 451 F.2d 849, 859- 60, 171 USPQ 713, 720 (5th Cir. 1971).

It should be noted that 35 U.S.C. 102(b) may create a bar to patentability either alone, if the device in public use or placed on sale anticipates a later claimed invention, or in conjunction with 35 U.S.C. 103, if the claimed invention would have been obvious from the device in conjunction with the prior art.

LaBounty Mfg. v. United States Int 'l Trade Comm 'n, 958 F.2d 1066, 1071, 22 USPQ2d 1025, 1028 (Fed. Cir. 1992)

2. Claims 1,2,5,6,11-13,28,29 and 32 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Wilson et al (US 4,438,863) in view of Morgan et al (US 5,562,759).

Claim 1: Wilson teaches a pond covering system with a membrane (figures, col 3 lines 3-7) having floatation members covered by the membrane (col 3 lines 20-54; 22,28-fig 4; fig 1; col 3 lines (26-29) and plurality of gas relief vents (col 3 lines 30-43; at 34-fig 4). With ref to fig 4, consider the membranes 10 on the right side as the first membrane, the float 22 on the left side as the first float and the sleeve 28 covering the float 22 as the compartment membrane. In this scenario, the gas passage between the strips 34 and through hole 38 in pipe 36 the gas passage *within the first membrane and adjacent the first flotation member*. (The claim does not recite that there are plurality of

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holes in the membrane adjacent the first floatation member). Considering another way, the first membrane would comprise membrane 10 on either side of the float, the first float would comprise all the floats 22 and the pipe 36, the membrane (sleeve 28) covering the floats and the pipe would be the float compartment membrane, and the passage between the strips 34 through holes 38 into the pipe 36 would be plurality of gas passage-ways positioned *within the first float compartment membrane*.

The Wilson reference differs from claim 1 in that the newly added limitations in claim 1 by amendment of 3/28/05 makes the gas-relief passages as extending from the top and bottom surfaces of the membrane. Morgan teaches such an arrangement wherein the gas relief passage extend from the bottom surface to the top surface of the membrane in a pool cover with a gas collection system. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Morgan in the teaching of Wilson because the Morgan system is simpler and can be easily installed and removed without destroying the system (see Morgan col 1 lines 15-25 and 44-47).

Claims 2,5: The first float (22) is sealed in the first float compartment membrane (28). The float compartment membrane and the first membrane are coupled – see fig 4.

Claim 6: The gas relief passage is elevated above the membrane level (see fig 2 and 4).

Claims 11-13: The membrane is anchored by an anchor system as in instant claim 11 and 21 (col 3 lines 20-25), which comprises connectors coupled to the edge of the membranes as in instant claim 12 with sleeves as in instant claim 13 (20 fig 2).

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Claims 28,29 and 32: Wilson (863) teaches a method for venting pool with providing a membrane pool cover having one or more membranes and float supports sealed in the membrane, and with a series of gas vent passages as in instant claims (see figures 1-10 and col 3 line 3-col 6 line 58, and the rejection of claims 1 and 16 for more details). Wilson also teaches venting directly to the atmosphere in col 5 lines 29-32, and vent 66 of fig 2. Thus Wilson anticipates direct venting through vent 66 in fig 2. If not, it would be obvious to one of ordinary skill in the art at the time of invention that the gas collected through the gas pipe 36 could be vented directly to the atmosphere, if separate collection of the gases is deemed unnecessary.

The Wilson reference differs from claims 28,29 and 32 in that the newly added limitations by amendment of 3/28/05 makes the gas-relief passages as extending from the top and bottom surfaces of the membrane. Morgan teaches such an arrangement wherein the gas relief passage extend from the bottom surface to the top surface of the membrane in a pool cover with a gas collection system. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Morgan in the teaching of Wilson because the Morgan system is simpler and can be easily installed and removed without destroying the system (see Morgan col 1 lines 15-25 and 44-47)

3. Claims 9,10,14,15, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al (US 4,438,863) in view of Morgan et al (US 5,562,759 as applied to claim 1 above and further in view of Ref C1 of the IDS of 2/17/04.

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Wilson in view of Morgan has more than one floatation member as in claim 9 – see fig 7.

Wilson in view of Morgan do not teach the elongated weight positioned between the first and the second floatation members as in claims 9 and 10, and the service opening in the rest of the instant claims. Drawing 1-3 of ref C1 shows such elongated weights. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of C1 to provide the elongated weights to direct the biogas to the gas passageways in the floats as suggested by the C1 ref, page 3. Drawing 1-5 “Access Hatch” of the ref C1 teaches an access opening with edge support floatation members and membrane coupled to the service opening extending down through the opening and having ballast weight attached. It would be obvious to one of ordinary skill in the art at the time of invention to use the teachings of ref C1 in the teachings of Wilson in view of Morgan to provide stable service openings for providing mechanical equipment, etc. Moreover, the reference C1 shows that the inventors had prior knowledge of the need for the elongated weights and the service openings, and this was not part of their invention.

(10) Response to Argument

Arguments with respect to Claim 33 are moot, since the after-final amendment of 11/21/05 was entered in the advisory action of 12/22/05.

Appellant’s Claims List in Appendix 2 is the correct version of the pending claims.

Appellant submits separate arguments for each of the three different grounds for rejection, and submits independent arguments for Claims 1, 28 and 32 for rejections under the first two grounds. These arguments are addressed in the same order as presented by the appellant.

B. The Obviousness rejection over admitted prior arts in view of the Gerber reference.

Appellants submitted the references C1-C13, C2 and C4 by IDS on 2/17/04. Appellant also admitted that the reference C4 is similar to the Gerber reference and that the reference C2 was available to the public more than one year before October 5, 2001, by affidavit on 3/28/05. In addition to providing some of the structural elements recited in the claims, the Gerber reference shows that the C4 is not appellant's invention and that it was available to the public more than one year before the effective filing date of the application.

1. Rejection of Claim 1:

Claim 1 recites the embodiments represented by appellant's figures 1 and 2. The C4 reference is similar to appellant's figure 2, except for the gas relief vents described in specification, page 12, lines 19-31. Reference C2 provides the gas relief vents as recited in the claim, as seen in the picture on the second page of C2, and teaches alternate design when the gas collection is not required, gases are allowed to escape, in page 3, middle column, and page 4, left column.

Appellant's argues that (1) C2 fails to suggest a gas relief passageway that is positioned within either the claimed float compartment membrane or the claimed first membrane and that is structured so that gas flows unobstructed through it when C2 system is used; and (2) there is no suggestion to combine the references. With respect to the location of the gas relief passageway, appellant's claim 1 has them located either on the first membrane or the first compartment membrane. This means that gas relief passageway can be anywhere on the expanse of the membrane on the covering system. Reference C2 teaches gas relief passageways and provides a motivation for using the gas relief passageways, whether gas collection is required or not (see the figures in page 2 and page 4). It would be obvious to one of ordinary skill in the art at the time of invention that ***when the gas collection is not required***, there is no point in providing the expensive gas collection structures in the Gerber reference, but simply provide some gas relief vents, as in C2. When gas collection is required, it could still be collected through the same passageways as shown in the figures in page 4 of reference C2. Gerber reference teaches that gas need be removed and collection of gases underneath the cover system is not desirable (see column 6 lines 30-35: gas bubbles would lift off the cover and subject it to subsequent wind damage). Gerber has gas collection passageways along the surface of the pond, under the cover (see column 2 lines 10-43). However, this system would not completely safeguard from the problems of "gas bubbles" Gerber teaches to avoid (Appellant's argument that the Gerber reference '*consistently reports that there are no lift off issues*' is not accurate: the reference in column 6 lines 28-34 says that there is less tendency to form the bubbles

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which lift the cover and render it subject to damaging wind forces; but this does not mean “no lift off issues”). Since C4 and Gerber do not have the gas collection passageways across the membrane, one would use the known teaching from C2. One would use the C2 teaching for its simplicity, easy installation because it is not a single sheet, cost-effectiveness, especially when gas collection is not required, and because the gas relief vents in C2 also work as rainwater drains. Thus there are sufficient reasons, or motivation, to combine the references. Deciding on the actual location, shape and size of holes, etc., would be within the skill level of one of ordinary skill in the art of pool covers. With respect to the “unobstructed gas flow”, the relief vents shown in C2 are unobstructed in the gap between the two membrane layers. Applicant’s definition of “unobstructed” is described in specification page 12 line 18: when the vent passages are bolt holes, the passages would not be “unobstructed” because the bolts obstruct the passage. The passages in the C2 reference are not bolt holes, but the gap between the membranes, and therefore, unobstructed.

In response to the argument that Gerber teaches away from the gas vent, and that the Gerber (and C4) are gas collection systems, claim 1 is not so limited, and is open to what happens to the gas that passes through the passageways. There is no limitation in Claim 1 that limits it to venting the gas to the atmosphere. Even if it had, Claim 1 would still be obvious over these references. Therefore, arguments that Gerber reference is for the purpose of containing and collecting the gas is not relevant and not commensurate in scope with Claim 1.

2. Rejection of Claim 28:

Claim 28 recites a method of venting using the system of claim 1, with the added limitation that the gas is vented to the atmosphere through the gas relief passageways.

As shown in the paragraph 1 above for claim 1, the system taught by the references could have features for venting to the atmosphere, and/or collecting. One would be motivated to combine the teachings of C2 and C4 (or Gerber) because, whether vented to the atmosphere, or collected, gas removal is required, and the combination would have teaching for both situations, i.e., whether venting or collecting.

In addition, it is also respectfully submitted that providing vents for such cover systems is known in the art as taught by the Gerber reference in column 1 lines 17-39, and Wilson reference (column 1 lines 24-30). Evidence, that the venting of the covers or liners are known and are a standard practice, is provided by Gagle et al (US 4,678,375); see column 17 lines 4-20, which teaches that air or gas vents are a standard practice, and that venting is primarily intended to control gas lift to avoid liner from rising up in the wind. Thus the Gerber reference is a teaching over the known art of venting the gas to a collection system.

Arguments that Gerber never advocated allowing gases to escape and teaches away from venting are not convincing: there are no such statements in Gerber to support this argument. The issue of mixing oxygen with methane gas to create potentially explosive mixtures is only in one of the intended uses taught by Gerber. More over, one of ordinary skill in the art would know that any danger of explosion does not exist when the system is vented; there is no gas collected in the vented system for

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explosion to happen. Such dangers happen only in collection systems when there are leaks, or when the membrane is permeable to oxygen, so that oxygen mixes with the collected methane. Also, such gas-collecting systems also require occasional venting, such as during system start-up or shutdown, and during system breakdowns.

3. Rejection of Claim 32:

Claim 32 recites a method as in claim 28, but without the limitations of the gas relief passageways. The reference C4 is capable of this venting of the gas to the atmosphere around the outer edge of the first membrane, since the membrane in C4 is described, alternately, as "battened to the top of a concrete ring wall" (see under the caption: PERIMETER ANCHOR SYSTEM); battening is not a gas tight seal. (Webster Dictionary meaning of battening is to fasten with a thin narrow strip of lumber). Thus C4 might as well anticipate the claim.

With respect to the appellant's argument that more is needed to establish a proper rejection, and that a plurality of claims should never be grouped together in a common rejection, 37 CFR 104 (c)(2) states:

"In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified."

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In this case, no one of ordinary skill in the art of pool covers would consider the reference C4 as complex, or state as describing invention other than appellant's invention. In fact, it significantly resembles appellant's figure 2, and the pertinence of the reference is quite apparent.

With respect to the grouping of the claims in the rejection, all claims in the group are rejected on the same basis, i.e., as obvious over the cited references; grounds for rejection are clearly stated with underlined caption, quoting the appropriate statutes, and giving sufficient detailed explanation. It is respectfully pointed out that the references used in this instance are not from any strange publication, but the ones submitted by the appellant as admitted prior art, with affidavits and details of attempted sale. There is nothing in this reference that can be considered as "not understood" by the appellant.

C. The Obviousness rejection over Wilson in view of Morgan.

1. Rejection of Claim 1:

Appellant argues that the office has not identified (1) a teaching for the unobstructed gas relief passageway and (2) an appropriate motivation to combine.

With respect to the gas relief passageway, Wilson teaches the gas passageways as shown in the rejection. The office used the Morgan reference for the teaching of the gas relief passageway "extending between the top and bottom surfaces of the membrane"; in Morgan, the passage is between the overlapping panels, leading from

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the bottom surface of the membrane to the top surface of membrane 1 in the figure 2.

With respect to the argument that Morgan reference is for a gas collection system, this has been recognized in the rejection, and for claim 1, this argument is not commensurate with the claim, as shown above in paragraph B.1. The passage is “unobstructed” as shown in paragraph B.1. above.

With respect to the “no motivation” argument and that modification of Wilson would destroy its gas collection nature: there is not reason to think that the combination of Wilson and Morgan would destroy the gas collection nature of Wilson, or render it unsatisfactory for its intended purpose, because Morgan teaches a gas collection system. Argument that Wilson teaches away from having gas relief passage way within sleeve 28 because sleeve 28 is designed to protect the structural integrity of the float 22 also is not persuasive because the float in the Morgan reference (parts shown with cross-hatch in figure 2) is also similarly sealed, and there is no question of breaching the structural integrity. Figure 4 of Wilson, when compared to the figure 2 of Morgan, one could easily recognize the similarities: floats sealed by the membrane sleeves, with gas passage between the sleeves and the gas collection pipe. The reason to combine, Morgan system being simpler and easier to install is also readily apparent, since the Wilson system is all joined to form one piece, and becomes laborious, whereas the Morgan system is easily separable at the joint in figure 2 and can be removed without destroying.

2. Rejection of Claim 28:

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The direct venting is clearly explained in the rejection. Wilson teaches direct venting. Rest of the arguments are addressed above in paragraph 1.

3. Rejection of Claim 32:

As argued by the appellant, claim 32 in relevant part is positioning the cover system to allow the gas to vent directly to the atmosphere. Wilson teaches the limitations of this system and the method of venting through the openings 66 at the outer edge of the membrane 10. Thus in fact, Wilson anticipates the claim 32.

D. Obviousness rejection over Wilson in view of Morgan and further in view of C1.

The arguments submitted are already addressed above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Patent Examiner
1/14/06



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Attachment: PTO 892.